



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,871	03/19/2004	Albert S. Deutsch	PISCES 02.03	7645

27667 7590 04/29/2005

HAYES, SOLOWAY P.C.
130 W. CUSHING STREET
TUCSON, AZ 85701

EXAMINER

LE, HOA VAN

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

15

Office Action Summary	Application No. 10/804,871	Applicant(s) DEUTSCH, ALBERT S.	
	Examiner Hoa V. Le	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>19 March 2004</u> . | 6) <input type="checkbox"/> Other: ____. |

This application is before the examiner for consideration on the merits.

I. All of the priority documents as made on the record in this application have been carefully studied with respect to (1) each of the supportive embodiments in the instant application and claims and (2) date of each of the supportive embodiments.

II. For an argument with respect to a supportive embodiment, applicant should and must clearly point out *page and line in a document number*... for a proper consideration. For an argument that this application and claims have priority documents as those on the record alone, it is not sufficient or proper as that of the record that they do not all support in each of the priority documents.

III. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Art Unit: 1752

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5, 7, part of 10 and 13-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4 and 6 of U.S. Patent No. 6,315,916 to Deutsch et al in view of Mori (Pub: 2001/0010892 now Pat. 6,596,462).

The claims in Deutsch et al are related to a process for imaging a printing plate having thereon a layer containing a diazo compound comprising the steps of jetting ink on the layer, heating and developing.

Deutsch et al do not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Deutsch et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16.

Since the above references are all related to methods of imaging a lithographic printing plate, it would have been obvious at the time the invention was made to use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable

Art Unit: 1752

expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori.

IV. Claims 2-4, 6, 8-9, part of 10 and 11-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4 and 6 of U.S. Patent No. 6,315,916 to Deutsch et al in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

The claims in Deutsch et al are related to a process for imaging a printing plate having thereon a layer containing a diazo compound comprising the steps of jetting ink on the layer, heating and developing.

Deutsch et al do not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Deutsch et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-6.1 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in

Art Unit: 1752

claims 15-16.

Deutsch et al and Mori do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Deutsch et al and Mori do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12.

Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3.

Deutsch et al and Mori do not specify the embodiments of claims 4 and 6.

Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6.

Deutsch et al and Mori do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated

Art Unit: 1752

polymerization initiators as part of claim 11. The language “heat setting...”, “photocrosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Deutsch et al and Mori do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art.

Deutsch et al and Mori do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite diazo resins, photo-crosslinkable polymer, diazide

Art Unit: 1752

and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

V. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Ma et al (5,292,556) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Ma et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Ma et al col.2:3-11 and 9:39-64.

Ma et al disclose their layers being non-photosensitive but do not specify "heat sensitive" as that in claim 1. It is reasonable that at least some of Ma et al layers (on col.3:20 to 5:48) are

Art Unit: 1752

heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Ma et al do not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Ma et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16.

Ma et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Ma et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a

Art Unit: 1752

latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3.

Ma et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6.

Ma et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11. The language "heat setting...", "phot-crosslinkable..." or "heat activated polymerization initiator" is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429.

Ma et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art.

Ma et al do not specify a heat setting monomer as in part of claim 10.

Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film

Art Unit: 1752

forming agent or binder.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori, use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed,

Art Unit: 1752

taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VI. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Arimatsu et al (5,312,654) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Arimatsu et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Arimatsu et al col.2:10-14 and 8:22-31.

Arimatsu et al do not specify "heat sensitive..." as that in claim 1. It is reasonable that at least some of Arimatsu et al layers (on col.8:35-36, 9:21-3,10:30-32, Tables 7-10) are heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Arimatsu et al do not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Arimatsu et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-6.1 microns as those in the

Art Unit: 1752

instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known as ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16.

Arimatsu et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Arimatsu et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3.

Arimatsu et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6.

Arimatsu et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that

Art Unit: 1752

at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11. The language "heat setting...", "phot-crosslinkable..." or "heat activated polymerization initiator" is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429.

Arimatsu et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art.

Arimatsu et al do not specify a heat setting monomer as in part of claim 10.

Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori.

Art Unit: 1752

use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori, use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

Art Unit: 1752

VII. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Furukawa (5,695,908) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Furukawa discloses, teaches and suggests to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Furukawa at col.21:34-42.

Furukawa does not specify "heat sensitive" as that in claim 1. It is reasonable that at least some of Furukawa layers (on col.3:57 to 10:56 and polymers P(1-8 on cols.15-18) are heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Furukawa does not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Furukawa does not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in

Art Unit: 1752

claims 15-16.

Furukawa does not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Furukawa do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3.

Furukawa does not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6.

Furukawa does not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization

Art Unit: 1752

initiators as part of claim 11. The language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429.

Furukawa does not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art.

Furukawa does not specify a heat setting monomer as in part of claim 10.

Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori. use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori.

Art Unit: 1752

use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VIII. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Miyabi et al (5,852,975) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Miyabi et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Miyabi et al col.2:44-51 and 7:5-7.

Miyabi et al disclose their layers being non-photosensitive but do not specify "heat sensitive" as that in claim 1. It is reasonable that at least some of Ma et al layers (on col.3:10-11, 4:20-29 and 6:1) are heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Mirabi et al do not specify a heating step using a near infrared emitter. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater.

Mirabi et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16.

Mirabi et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Ma et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3.

Mirabi et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6.

Mirabi et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11. The language "heat setting...", "phot-crosslinkable..." or "heat activated polymerization initiator" is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429.

Art Unit: 1752

Mirabi et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art.

Mirabi et al do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori. use or include the near infrared emitter for a reasonable expectation of obtaining a sufficiently heat energy as disclosed, taught, suggested and obtained in Mori, use or cite energy absorption pigments for a reasonable expectation of obtaining a sufficient heat as disclosed, taught and suggested in Mori, use or cite resin binder for a reasonable expectation of obtaining stable film forming layer as disclosed, taught and suggested in Mori and use or cite ablative materials for a reasonable expectation of changing physical property of the material as known in the art and used in Mori. use or cite the known washing or rinsing step after a developing step for a

Art Unit: 1752

reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

IX. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Art Unit: 1752

Applicants may file a paper by (1) fax with a central facsimile receiving number 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
26 April 2005

HOA VAN LE
PRIMARY EXAMINER
